## **Department of Energy**

§ 429.26

(b) [Reserved] [78 FR 63840, Oct. 25, 2013]

## § 429.26 Fluorescent lamp ballasts.

- (a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 are applicable to fluorescent lamp ballasts; and
- (2) For each basic model of fluorescent lamp ballasts, a sample of suffi-

cient size, not less than four, shall be randomly selected and tested to ensure that—

- (i) Any represented value of estimated annual energy operating costs, energy consumption, or other measure of energy consumption of a basic model for which consumers would favor lower values shall be greater than or equal to the higher of:
  - (A) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\overline{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the  $i^{th}$  sample; or.

 $\stackrel{\frown}{(B)}$  The upper 99 percent confidence limit (UCL) of the true mean divided by 1.01, where:

$$UCL = \bar{x} + t_{.99} \left( \frac{s}{\sqrt{n}} \right)$$

And  $\overline{x}$  is the sample mean; s is the sample standard deviation; n is the number of samples; and  $t_{0.99}$  is the t statistic for a 99% one-tailed confidence interval with n-1 degrees of freedom (from Appendix A).

and

(ii) Any represented value of the ballast efficacy factor or other measure of the energy consumption of a basic model for which consumers would favor a higher value shall be less than or equal to the lower of:

(A) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\bar{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the i<sup>th</sup> sample; Or,

(B) The lower 99 percent confidence limit (LCL) of the true mean divided by 0.99, where:

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$$LCL = \overline{x} - t_{.99} \left( \frac{s}{\sqrt{n}} \right)$$

And  $\overline{x}$  is the sample mean; s is the sample standard deviation; n is the number of samples; and  $t_{0.99}$  is the t statistic for a 99% one-tailed confidence interval with n-1 degrees of freedom (from Appendix A).

- (b) Certification reports. (1) The requirements of §429.12 are applicable to fluorescent lamp ballasts; and
- (2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information: The ballast efficacy factor, the ballast power factor, the number of lamps operated by the ballast, and the type of lamps operated by the ballast.

[76 FR 12451, Mar. 7, 2011; 76 FR 24769, May 2, 2011]

## § 429.27 General service fluorescent lamps, general service incandescent lamps, and incandescent reflector lamps.

(a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 are applicable to general service fluorescent lamps, general service incandescent lamps and incandescent reflector lamps; and

(2)(i) For each basic model of general service fluorescent lamp and incandescent reflector lamp, samples of production lamps shall be obtained from a 12month period, tested, and the results averaged. A minimum sample of 21 lamps shall be tested. The manufacturer shall randomly select a minimum of three lamps from each month of production for a minimum of 7 out of the 12-month period. In the instance where production occurs during fewer than 7 of such 12 months, the manufacturer shall randomly select 3 or more lamps from each month of production, where the number of lamps selected for each month shall be distributed as evenly as practicable among the months of production to attain a minimum sample of 21 lamps. Any represented value of lamp efficacy of a basic model shall be based on the sample and shall be less than or equal to the lower of:

(A) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\overline{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the i<sup>th</sup> sample; or,

(B) The lower 95 percent confidence limit (LCL) of the true mean divided by .97, where: